

## How to Self-Host GeoGebra Applets (June 2019)

1. Open your finished GeoGebra file. Adjust the size of the applet window, say, 1000x600 pixels.
2. Press “Ctrl + Shift + M” (Command + Shift + M for MAC) to export HTML code string to clipboard.
3. Open any text editor (like Notepad in Windows) and paste.

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4  <meta name=viewport content="width=device-width,initial-scale=1">
5  <meta charset="utf-8"/>
6  <script src="https://cdn.geogebra.org/apps/deployggb.js"></script>
7
8  </head>
9  <body>
10 <div id="ggbApplet"></div>
11
12 <script>
13 var parameters = {
14   "id": "ggbApplet",
15   "width":757,
16   "height":587,
17   "showMenuBar":true,
18   "showAlgebraInput":true,
19   "showToolBar":true,
20   "customToolBar":"0 39 | 1 501 67 , 5 19 , 72 75 76 | 2 15 45 , 18 65 , 7 37 | 4 3 8 9 ,
21   "showToolBarHelp":false,
22   "showResetIcon":false,
23   "enableLabelDrags":false,
24   "enableShiftDragZoom":true,
25   "enableRightClick":false,
26   "errorDialogsActive":false,
27   "useBrowserForJS":false,
28   "allowStyleBar":false,
29   "preventFocus":false,
30   "showZoomButtons":true,
31   "capturingThreshold":3,
32   // add code here to run when the applet starts
33   "appletOnLoad":function(api){ /* api.evalCommand('Segment((1,2),(3,4))');*/ },
34   "showFullscreenButton":true,
35   "scale":1,
36   "disableAutoScale":false,
37   "allowUpscale":false,
38   "clickToLoad":false,
39   "appName":"classic",
40   "showSuggestionButtons":true,
41   "buttonRounding":0.7,
42   "buttonShadows":false,
43   "language":"en",
44   // use this instead of ggbBase64 to load a material from geogebra.org
45   // "material_id":"RHYH3UQ8",
46   // use this instead of ggbBase64 to load a .ggb file
47   // "filename":"myfile.ggb",
48   "ggbBase64":"UESDBBQACAgIABmwuk4AAAAAAAAAAAAAAAAAWAAAAZ2VvZ2VicmFfamF2YXNjcmlwdC5qc0srzU:
49 };
50 // is3D=is 3D applet using 3D view, AV=Algebra View, SV=Spreadsheet View, CV=CAS View, I
51 var views = {'is3D': 0, 'AV': 1, 'SV': 0, 'CV': 0, 'EV2': 0, 'CP': 0, 'PC': 0, 'DA': 0, 'FI': 0
52 var applet = new GGBApplet(parameters, '5.0', views);
53 window.onload = function() {applet.inject('ggbApplet')};
54 applet.setPreviewImage('
55 </script>
56 </body>
57 </html>
58

```

4. Save the file as “filename.html”. Double click the file to open it in browser. You should see your applet running. Note that you still need internet connection to run this HTML file.

5. Use your text editor to open your html file again. Adjust the parameters on line 15-43 according to your needs, e.g.

```
"width":1000,
"height":600,
"showMenuBar":false,
"showAlgebraInput":false,
"showToolBar":false,
"showResetIcon":false,
"enableLabelDrags":false,
"enableShiftDragZoom":false,
"showZoomButtons":false,
```

Specifications of the parameters can be found in

[https://wiki.geogebra.org/en/Reference:GeoGebra\\_App\\_Parameters](https://wiki.geogebra.org/en/Reference:GeoGebra_App_Parameters).

6. You can add a custom header between line 9 and line 10, e.g.

```
<body>
<p>Select your target level of questions. Choose the correct
answers and then press "Check".</p>
<div id="ggbApplet"></div>
```

You can also add a custom footer between line 55 and line 56, e.g.

```
</script>
<p>gMath Classroom (www.gmath.hk), Hong Kong</p>
</body>
```

7. Save the file and open it in browser again to test. In case you want to change your ggb file after you have exported the HTML code, you can press “Ctrl + Shift +B” (Command + Shift + B for MAC) to export the ggbBase64 string to clipboard. Replace the original string in line 48:

```
"ggbBase64": " (replace this very long string) "};
```

In this case you may want to delete line 54 to delete the old preview image.

8. If you have your own webhost, then you can upload the HTML file and access it by URL like [www.yourdomainname.com/filename.html](http://www.yourdomainname.com/filename.html).

Otherwise, you may sign up a free web hosting account in <http://infinityfree.net>. This is an example: <http://gmath.epizy.com/material-test.html>.

9. Line 6 indicates that the HTML file access the GeoGebra software through the official server. In case you want to host your own copy of GeoGebra, you can download the “GeoGebra Math Apps Bundle” from <https://download.geogebra.org/package/geogebra-math-apps-bundle>. Then you can unzip the folder “GeoGebra” and upload it to the same place as the html file. Multiple HTML files can share the same “GeoGebra” folder. You don’t need to change this folder unless you want to update it for a newer version.

Note that line 6 in the HTML file should be changed to

```
<script src="GeoGebra/deployggb.js"></script>
```